

FAMILY NAME AND INDIVIDUAL VARIATIONS OF PEDILID BEETLES, WITH CORRECTIONS (COLEOPTERA: ANTHICIDAE: PEDILINAE)

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This paper reports on three topics pertaining to the systematics of the pedilid beetles which are separately discussed below.

I. THE FAMILY NAME: ANTHICIDAE

The question of whether the pedilid beetles represent a separate family or a subfamily of Anthicidae is subjective in nature, and the evidence is in my opinion now overwhelming in favor of treating the group as a subfamily. The eyes are finely-faceted and more or less emarginate, and the hind coxae are contiguous or nearly so in the pedilid beetles. These characters, which have been used to separate the two groups into two different families in the past are rather weak. Several genera and species of beetles assigned to Pedilidae do not even have the family characters. Thus, the eyes are entire in *Pergetus* Casey, *Stereopalpus* Laferte-Senectere and *Duboisius* Abdullah (rarely, feebly emarginate), and are at most only feebly emarginate in *Bactrocerus* LeConte and *Egestria* Pascoe. Further, the eyes are coarsely-faceted in *Bactrocerus* LeConte, *Leptoremus* Casey and *Duboisius* Abdullah. In the genus *Pedilus* Fischer, one species (*parvicollis* Fall) has the eyes relatively coarsely-faceted in comparison with the other species in the genus. Crowson (1955) places the group as a subfamily of Anthicidae since the two groups share the following characters: 1. All visible abdominal sternites free; 2. Mesepisterna usually meeting in front of the mesosternum; 3. Tarsi with the penultimate segment more or less lobed below and the antepenultimate segment simple; 4. Internal keel of hind coxae usually reduced to a narrow-based apophysis; 5. Metendosternite not of the byturid type.

I agree with Crowson and consider the group, Pedilinae, a subfamily of Anthicidae.

II. VARIATION OF CHARACTERS

It appears to me that the following characters are fairly constant within a given species of Pedilinae: 1. Type and shape of the antenna within a sex; 2. Emargination and facets in the eye (whether fine or coarse); 3. Punctures on the head, pronotum and elytra (whether sparse or dense, fine or coarse); 4. Modification in the elytral apex of the male (in *Pedilus* only); 5. Closed or open condition of anal cell in the wing; 6. Size of teeth present in the tarsal claws within a sex; 7. Presence or absence of spines on metasternum of the male; 8. Emargination and shape of the last visible abdominal sternite and tergite; 9. Characters of the male genitalia.

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The following characters are subject to considerable intraspecific variation depending upon the species concerned: 1. Color of clypeus and maxillary palpi; 2. Color of pronotum; 3. Color of legs; 4. Color of the last two abdominal sternites.

III. CORRECTIONS AND ADDITIONS

The following remarks concern my recent paper on *Duboisius* (Abdullah 1961:97-104).

The generic name *Pseudobactrocera* Abdullah (1961:97) was a *nomen nudum*; it will be described at a later date. The spelling of the type locality of *Duboisius emarginatus* Abdullah (1961:103) should be corrected to "Tehuantepec." The types of the species of *Duboisius* Abdullah (1961:97-104) described from the collection of Mr. Roy R. Snelling will be deposited in the California Academy of Sciences.

My placing of "*Duboisius benedicti*, NEW SPECIES" above an original description (Abdullah, 1961:103) was a *lapsus calami*; the correct heading over that description should be "*Duboisius mexcaliensis*, NEW SPECIES." *D. mexcaliensis* was correctly placed in the key (1961:98) and correctly labeled in the illustration (1961, Fig. 24).

The description of *D. benedicti*, a new species, was omitted from that article. Nevertheless, *D. benedicti* was correctly delimited in a key (1961:-98) and the genitalia were correctly illustrated (1961, Figs. 22, 23). Thus the species *D. benedicti* should be considered as having been originally proposed in 1961. The description of *D. benedicti* is given below.

Duboisius benedicti Abdullah, 1961: 98, Figs. 22, 23.

MALE: Length: 7 mm. Width: 2 mm. Metasternum with a spinous patch. Wing with anal cell closed. Abdomen with seventh sternite shallowly emarginate (1961, Fig. 22); eighth sternite nearly as long as wide, lateral processes twice as long as central processes; eighth tergite slightly notched. Genitalia: Parameres irregularly punctate and spinous with linear arrangement occasionally, abruptly tapering near apex (1961, Fig. 23).

FEMALE: not known.

Holotype: Male, White Sands, New Mexico, 7-23-33, W. Benedict. The holotype is to be deposited eventually at the University of Kansas.

LITERATURE CITED

- ABDULLAH, M.
1961. Systematics of *Duboisius*, a new genus of pedilid beetles (Pedilidae). *Coleopt. Bull.* 15(4):97-104, illus.
- CROWSON, R. A.
1955. *The natural classification of the families of Coleoptera*. London.

LITERATURE NOTICE

SUR LARVALSYSTEMATIK DER GATTUNG AGRIOTES ESCH. (COL. ELATERIDAE), by Joachim Oehlke. *Deutsche Ent. Zeitschrift N.F.* 9(3/4):336-349, 11 figs., 1962.—Presents key to larvae of 8 species. Attempts to solve difficulties in larvae of this genus by using proportions of spiracles.